Series CSP (CA55)

CSP(CA55)

Conductive Polymer Solid Electrolytic Tantalum SMD Capacitors

Brief Introduction

CSP Series is molded solid tantalum capacitor with sintered and polymer as the cathode, featuring Low ESR and good frequency response, resistance to high ripple current, small size, small weight, high reliability and long life.
CSP Series is suitable for SMD electric circuits in telecommunications, computer, mobile phone set, portable digital devices.
CSP Series is equivalent to KEMET T520 & AVX TCJ

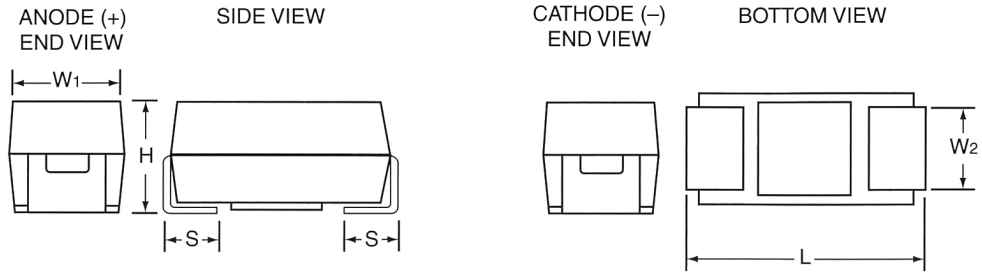
SPECIFICATION:

<table>
<tr><th>Item</th><th>Performance Characteristics</th></tr>
<tr><td>Operating Temperature Range</td><td>-55 to + 125˚C (>85˚C with rated voltage derating)</td></tr>
<tr><td>Rated Working Voltage Range</td><td>2.5 to -100V DC</td></tr>
<tr><td>Nominal Capacitance Range</td><td>0.1μF to 2200MF μF</td></tr>
<tr><td>Capacitance Tolerance</td><td>±20% (120Hz, +20˚C)</td></tr>
<tr><td>Leakage Current</td><td>Not more than 0.1cv (μA)</td></tr>
<tr><td>tan δ
(120Hz, +20˚C)</td><td>See next page</td></tr>
<tr><td>Characteristics at High and Low Temperature</td><td>
<table>
<tr><td>-55˚C</td><td>Capacitance change</td><td>±12% of initial measured value at +20˚C</td></tr>
<tr><td rowspan="2">+105˚C</td><td>Leakage current</td><td>≤12.5% of initial measured value</td></tr>
<tr><td>Capactiance change</td><td>±15% of initial measured value at +20˚C</td></tr>
</table>
</td></tr>
<tr><td>Moisture Resistance</td><td>Test conditions
Relative humidity : 90 to 95% without load
Ambient temperature : +40˚C
Duration : 500 hours
Post test requirements at + 20˚C
Leakage current : ≤ Initial specified value
Capacitance change : ± 10% of initial measured value
tan δ : ≤ Inital specified value</td></tr>
<tr><td>Endurance</td><td>Test conditions
<table>
<tr><th>Conditions / Item</th><th>Derating</th><th>Rating</th></tr>
<tr><td>Duration</td><td>1000 hours</td><td>1000 hours</td></tr>
<tr><td>Ambient temperature</td><td>+ 105˚C</td><td>+ 85˚C</td></tr>
<tr><td>Applied voltage</td><td>Derated working voltage</td><td>Rated working voltage</td></tr>
<tr><td>Source impedance</td><td>1Ω/V</td><td>1Ω/V</td></tr>
</table>
Derating voltage + 105˚C
<table>
<tr><td>Working voltage [V] DC</td><td>2.5</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>25</td><td>32</td><td>40</td><td>63</td><td>75</td><td>100</td></tr>
<tr><td>Derating voltage [V] DC</td><td>1.6</td><td>2.5</td><td>4</td><td>6.3</td><td>10</td><td>16</td><td>20</td><td>25</td><td>40</td><td>50</td><td>63</td></tr>
</table>
Post test requirements at +20˚C
Leakage current : ≤ 125% of initial specified value
Capacitance change : ± 10% of initial measured value
tan δ : ≤ Inital specified value</td></tr>
<tr><td>Shelf Life</td><td>Test conditions
Duration : 2000 hours
Ambient temperature : +105˚C
Applied voltage : (none)
Post test requirements at +20˚C
Same limits for "Endurance".</td></tr>
<tr><td>Solder Heat Resistance</td><td>The capacitor shall withstand dipping into solder bath for 5±1 seconds at 260±5˚C</td></tr>
<tr><td colspan="2">3 X Reflow 260˚C compatible</td></tr>
</table>

Series CSP (CA55)

Polymer Solid Electrolytic Tantalum SMD Capacitors

1. Tantalum Capacitor CHIP TYPE OUTLINE DRAWINGS.



2. Dimensions Millimeters

CASE CODE	EIA	L	W	H	P	T_W
A	3216	3.2±0.2	1.6±0.2	1.6±0.2	0.8±0.2	1.2±0.2
B	3528	3.5±0.2	2.8±0.2	1.9±0.2	0.8±0.2	2.2±0.2
C	6032	6.0±0.2	3.2±0.2	2.5±0.2	1.3±0.2	2.2±0.2
D	7343	7.3±0.2	4.3±0.2	2.8±0.2	1.3±0.2	2.4±0.2
E	7343	7.3±0.4	4.3±0.4	4.1±0.4	1.3±0.2	2.4±0.2
V	7361	7.3±0.4	6.1±0.4	3.6±0.4	1.35±0.2	3.0±0.2
W	7361	7.3±0.4	6.1±0.4	4.1±0.4	1.35±0.2	3.0±0.2
G	8575	8.5±0.4	7.5±0.4	4.5±0.4	1.8±0.2	4.5±0.2
T	110125	11.0±0.4	12.5±0.4	5.5±0.4	1.5±0.2	10.5±0.2

3. Rated Voltage, Capacitance of Capacitors.

Rated Voltage(V)	2.5	4	6.3	10	16	20	25	35	50	63	75	100
Capacitance(uF)	Case Size											
0.1 (104)												A
0.15 (154)												A/B
0.22 (224)												A/B
0.33 (334)											A/B	B/C
0.47 (474)											B/C	B/C
0.68 (684)										B/C	B/C	C/D
1.0 (105)									B/C	B/C	C/D	C/D
1.5 (155)									B/C/D	C/D	C/D	D/E
2.2 (225)									B/C/D	C/D	C/D	E/V
3.3 (335)									C/D	C/D	D/E	V/W
4.7 (475)					A/B		B/C	B/C/D	C/D	C/D/E	D/E/V	E/V/W
6.8 (685)					A/B/C		B/C/D	B/C/D	C/D/E/V	D/E/V	D/E/V	V/W
10 (106)			A	A/B	A/B/C	B/C	B/C/D	C/D	D/E/V	D/E/V	E/V/W	W
15 (156)		A/B	A/B/C	A/B	B/C	B/C/D	B/C/D	C/D/E/V	E/V/W	E/V/W	V/W	G
22 (226)		A/B/C	A/B/C	A/B	B/C/D	B/C/D	C/D/E/V	D/E/V	D/E/V/W	V/W/G	W/G	T
33 (336)		A/B/C	A/B/C/D	B/C	C/D	C/D/E/V	D/E/V	D/E/V	E/V/W/G	W/G	T	T
47 (476)	A	A/B/C/D	A/B/C/D	B/C	C/D/E/V	C/D/E/V	D/E/V	E/V/W	V/W/G	W/G	T	
68 (686)	A	A/B/C/D	B/C/D	C/D/E/V	C/D/E/V	D/E/V	D/E/V	V/W/G	V/W/G	G/T	T	
100 (107)	A/B	B/C/D	B/C/D/E	C/D/E/V	D/E/V	D/E/V	E/V/W	W/G	T	T	T	
150 (157)		B/C/D/E/V	B/C/D/E/V	C/D/E/V	D/E/V	E/V	V/W/G	G	T			
220 (227)	B/C/D	B/C/D/E/V	C/D/E/V	D/E/V	D/E/V	E/V/W	W/G	T				
330 (337)	B/C/D	C/D/E/V	D/E/V	D/E/V	E/V/W	G	G/T	T				
470 (477)	C/D	D/E/V	D/E/V	E/V/W	W/G	G	T					
680 (687)	DE	D/E/V	E/V/W	V/W/G	G	T						
1000 (108)	D/E	E/V/W	V/W/G	W/G	T	T						
1500 (158)	E	W/G	W/G		T							
2200 (228)		G	G	T								

CA55 Conductive Polymer Chip Tantalum Capacitors

STANDARD RATING

CAPACITANCE uF	CASE SIZE	PART NUMBER	DC LEAKAGE uA At 25℃ MAX	DF % MAX at 120HZ 25℃	ESR mΩ MAX 100KHZ at 25℃	Ripple current 100KHz A	
						+25℃	+85℃
2.5 Volt. Rating							
47	A	CA55-A2R5476TE090	11.7	8	90	1.06	0.74
68	A	CA55-A2R5686TE080	17	8	80	1.11	0.78
100	B	CA55-B2R5107TE070	25	10	70	1.33	0.93
100	A	CA55-A2R5107TE200	25	10	200	0.7	0.49
220	D	CA55-D2R5227TE040	55	10	40	2.37	1.66
220	C	CA55-C2R5227TE045	55	10	45	1.97	1.38
220	B	CA55-B2R5227TE070	55	10	70	1.33	0.93
330	D	CA55-D2R5337TE040	82	10	40	2.37	1.66
330	C	CA55-C2R5337TE045	82	10	45	1.97	1.38
330	B	CA55-B2R5337TE070	82	10	70	1.33	0.93
470	D	CA55-D2R5337TE040	117	10	40	2.37	1.66
470	C	CA55-C2R5337TE045	117	10	45	1.97	1.38
680	E	CA55-E2R5687TE035	170	10	35	2.67	1.87
680	D	CA55-D2R5687TE040	170	10	40	2.37	1.66
1000	E	CA55-E2R5108TE025	250	10	25	3.16	2.21
1000	D	CA55-D2R5108TE035	250	10	35	2.53	1.77
1500	E	CA55-E2R5158TE025	375	12	25	3.16	2.21

CA55 Conductive Polymer Chip Tantalum Capacitors

STANDARD RATING

CAPACITANCE uF	CASE SIZE	PART NUMBER	DC LEAKAGE uA At 25℃ MAX	DF % MAX at 120HZ 25℃	ESR mΩ MAX 100KHZ at 25℃	Ripple current 100KHz A	
						+25℃	+85℃
4.0 Volt. Rating							
15	B	CA55-B004156TE090	6	6	90	1. 17	0. 82
15	A	CA55-A004156TE120	6	8	120	0. 91	0. 64
22	C	CA55-C004226TE070	8. 8	10	70	1. 58	1. 10
22	B	CA55-B004226TE080	8. 8	6	80	1. 24	0. 87
22	A	CA55-A004226TE100	8. 8	8	100	1. 0	0. 7
33	C	CA55-C004336TE070	13. 2	6	70	1. 58	1. 11
33	B	CA55-B004336TE080	13. 2	6	80	1. 24	0. 87
33	A	CA55-A004336TE080	13. 2	8	80	1. 11	0. 78
47	D	CA55-D004476TE050	18. 8	10	50	2. 12	1. 48
47	C	CA55-C004476TE055	18. 8	6	55	1. 78	1. 25
47	B	CA55-B004476TE080	18. 8	6	80	1. 24	0. 87
47	A	CA55-A004476TE080	18. 8	8	80	1. 11	0. 78
68	D	CA55-D004686TE050	27. 2	10	50	2. 12	1. 48
68	C	CA55-C004686TE055	27. 2	6	55	1. 78	1. 25
68	B	CA55-B004686TE080	27. 2	6	80	1. 24	0. 87
68	A	CA55-A004686TE250	27. 2	8	250	0. 63	0. 44
100	D	CA55-D004107TE045	40	10	45	2. 23	1. 56
100	C	CA55-C004107TE045	40	8	45	1. 97	1. 38
100	B	CA55-B004107TE080	40	10	80	1. 24	0. 87
150	V	CA55-V004157TE060	60	10	35	3. 20	2. 24
150	E	CA55-E004157TE040	60	10	40	2. 50	1. 75
150	D	CA55-D004157TE040	60	8	40	2. 37	1. 66
150	C	CA55-C004157TE045	60	8	45	1. 97	1. 38
150	B	CA55-B004157TE070	60	10	70	1. 33	0. 93
220	V	CA55-V004227TE035	88	10	35	3. 20	2. 24
220	E	CA55-E004227TE040	88	10	40	2. 50	1. 75
220	D	CA55-D04227TE040	88	8	40	2. 37	1. 66
220	C	CA55-C004227TE045	88	8	45	1. 97	1. 38
220	B	CA55-B004227TE070	88	10	70	1. 33	0. 93
330	V	CA55-V004337TE035	132	10	35	3. 20	2. 24
330	E	CA55-E004337TE040	132	10	40	2. 50	1. 75

CA55 Conductive Polymer Chip Tantalum Capacitors

STANDARD RATING

CAPACITANCE uF	CASE SIZE	PART NUMBER	DC LEAKAGE uA At 25℃ MAX	DF % MAX at 120HZ 25℃	ESR mΩ MAX 100KHZ at 25℃	Ripple current 100KHz A	
						+25℃	+85℃
4.0 Volt. Rating							
330	D	CA55-D004337TE040	132	8	40	2. 37	1. 66
330	C	CA55-C004337TE045	132	8	45	1. 97	1. 38
470	V	CA55-V004477TE035	188	10	35	3. 20	2. 24
470	E	CA55-E004477TE040	188	10	40	2. 50	1. 75
470	D	CA55-D004477TE040	188	10	40	2. 37	1. 66
680	V	CA55-V004687TE035	272	10	35	3. 20	2. 24
680	E	CA55-E004687TE035	272	10	35	2. 67	1. 87
680	D	CA55-D004687TE035	272	10	35	2. 53	1. 77
1000	W	CA55-W004108TE025	400	10	25	3. 90	2. 73
1000	V	CA55-V004108TE030	400	10	30	3. 46	2. 42
1000	E	CA55-E004108TE030	400	10	30	2. 88	2. 02
1500	G	CA55-G004158TE025	600	12	25	4. 47	3. 13
1500	W	CA55-W004158TE025	600	12	25	3. 90	2. 73
2200	G	CA55-G004228TE025	880	12	25	4. 47	3. 13
6.3 Volt. Rating							
10	A	CA55-A6R3106TE120	6. 3	8	120	0. 91	0. 64
15	C	CA55-C6R3156TE070	9. 4	8	70	1. 58	1. 10
15	B	CA55-B6R3156TE090	9. 4	6	90	1. 17	0. 82
15	A	CA55-A6R3156TE090	9. 4	8	120	0. 91	0. 64
22	C	CA55-C6R3226TE070	13. 8	8	70	1. 58	1. 1
22	B	CA55-B6R3226TE080	13. 8	6	80	1. 24	0. 87
22	A	CA55-A6R3226TE100	13. 8	8	100	1. 0	0. 7
33	D	CA55-D6R3336TE060	20. 8	10	60	1. 93	1. 35
33	C	CA55-C6R3336TE070	20. 8	6	70	1. 58	1. 11
33	B	CA55-B6R3336TE080	20. 8	6	80	1. 24	0. 87
33	A	CA55-A6R3336TE120	20. 8	8	120	0. 91	0. 64
47	D	CA55-D6R3476TE050	29. 6	10	50	2. 12	1. 48
47	C	CA55-C6R3476TE055	29. 6	6	55	1. 78	1. 25
47	B	CA55-B6R3476TE080	29. 6	6	80	1. 24	0. 87
47	A	CA55-A6R3476TE150	29. 6	8	150	0. 81	0. 57
68	D	CA55-D6R3686TE050	42. 8	10	50	2. 12	1. 48
68	C	CA55-C6R3686TE055	42. 8	6	55	1. 78	1. 25
68	B	CA55-B6R3686TE080	42. 8	8	80	1. 24	0. 87
100	E	CA55-E6R3107TE040	63	10	40	2. 50	1. 75
100	D	CA55-D6R3107TE045	63	10	45	2. 23	1. 56
100	C	CA55-C6R3107TE055	63	8	55	1. 97	1. 38

CA55 Conductive Polymer Chip Tantalum Capacitors

STANDARD RATING

CAPACITANCE uF	CASE SIZE	PART NUMBER	DC LEAKAGE uA At 25℃ MAX	DF % MAX at 120HZ 25℃	ESR 100KHZ mΩ at 25℃ MAX	Ripple current 100KHz A	
						+25℃	+85℃
6.3 Volt. Rating							
100	B	CA55-B6R3107TE070	63	10	70	1. 33	0. 93
150	V	CA55-V6R3157TE035	94. 5	10	35	3.20	2.24
150	E	CA55-E6R3157TE040	94.5	10	40	2.50	1.75
150	D	CA55-D6R3157TE040	94. 5	8	40	2.37	1.66
150	C	CA55-C6R3157TE055	94. 5	8	55	1.78	1.25
150	B	CA55-B6R3157TE070	94. 5	10	70	1.33	0.93
220	V	CA55-V6R3227TE035	138	10	35	3.20	2.24
220	E	CA55-E6R3227TE040	138	10	40	2.50	1.75
220	D	CA55-D6R3227TE040	138	8	40	2.37	1.66
220	C	CA55-C6R3227TE045	138	8	45	1.97	1.38
330	V	CA55-V6R3337TE035	207	10	35	3.20	2.24
330	E	CA55-E6R3337TE040	207	8	40	2.50	1.75
330	D	CA55-D6R3337TE040	207	8	40	2.37	1.66
470	V	CA55-V6R3477TE035	296	10	35	3.20	2.24
470	E	CA55-E6R3477TE035	296	8	35	2.67	1.87
470	D	CA55-D6R3477TE040	296	10	40	2.37	1.66
680	W	CA55-W6R3687TE030	428	10	30	3.56	2.49
680	V	CA55-V6R3687TE030	428	10	30	3.46	2.42
680	E	CA55-E6R3687TE030	428	10	30	2.88	2.02
1000	G	CA55-G6R3108TE030	630	10	30	4.08	2.86
1000	W	CA55-W6R3108TE030	630	10	30	3.56	2.49
1000	V	CA55-V6R3108TE035	630	10	35	3.20	2.24
1500	G	CA55-G6R3158TE030	945	12	30	4.08	2.86
1500	W	CA55-W6R3158TE030	945	12	30	3.56	2.49
2200	G	CA55-G6R3228TE030	1386	12	30	4.08	2.86
10 Volt. Rating							
10	B	CA55-B010106TE090	10	6	90	1.17	0.82
10	A	CA55-A010106TE120	10	8	120	0.91	0.64
15	B	CA55-B010156TE090	15	6	90	1.17	0.82
15	A	CA55-A010156TE120	15	8	120	0.91	0.64
22	B	CA55-B010226TE080	22	6	80	1.24	0.87
22	A	CA55-A010226TE120	22	8	120	0.91	0.64
33	C	CA55-C010336TE070	33	6	70	1.58	1.11
33	B	CA55-B010336TE070	33	8	70	1.24	0.87
47	C	CA55-C010476TE055	47	6	55	1.78	1.25

CA55 Conductive Polymer Chip Tantalum Capacitors

STANDARD RATING

CAPACITANCE uF	CASE SIZE	PART NUMBER	DC LEAKAGE uA At 25℃ MAX	DF % MAX at 120HZ 25℃	ESR 100KHZ mΩ at 25℃ MAX	Ripple current 100KHz A	
						+25℃	+85℃
10 Volt. Rating							
47	B	CA55-B010476TE055	47	8	70	1.33	0.93
68	V	CA55-V010686TE040	68	10	40	3.00	2.10
68	E	CA55-E010686TE040	68	10	40	2.50	1.75
68	D	CA55-D010686TE045	68	6	45	2.23	1.56
68	C	CA55-C010686TE045	68	6	45	1.97	1.38
100	V	CA55-V010107TE035	100	10	35	3.20	2.24
100	E	CA55-E010107TE040	100	10	40	2.50	1.75
100	D	CA55-D010107TE040	100	8	40	2.37	1.66
100	C	CA55-C010107TE045	100	8	45	1.97	1.38
150	V	CA55-V010157TE035	150	10	35	3.20	2.24
150	E	CA55-E010157TE040	150	8	40	2.50	1.75
150	D	CA55-D010157TE040	150	8	40	2.44	1.71
150	C	CA55-C010157TE055	150	10	55	1.78	1.25
220	V	CA55-V010227TE035	220	10	35	3.20	2.24
220	E	CA55-E010227TE040	220	8	40	2.50	1.75
220	D	CA55-D010227TE040	220	8	40	2.37	1.66
330	V	CA55-V010337TE040	330	8	40	3.00	2.10
330	E	CA55-E010337TE040	330	8	40	2.50	1.75
330	D	CA55-D010337TE050	330	10	50	2.11	1.48
470	W	CA55-W010477TE035	470	10	35	3.30	2.31
470	V	CA55-V010477TE040	470	10	40	3.00	2.10
470	E	CA55-E010477TE050	470	10	50	2.23	1.56
680	G	CA55-G010687TE030	680	10	30	4.08	2.86
680	W	CA55-W010687TE030	680	10	30	3.56	2.49
680	V	CA55-V010687TE030	680	10	30	3.46	2.42
1000	G	CA55-G010108TE030	1000	10	30	4.08	2.86
1000	W	CA55-W010108TE030	1000	10	30	3.56	2.49
2200	T	CA55-T010228TE030	2200	12	30	5.54	3.88
16 Volt. Rating							
4.7	B	CA55-B016475TE150	7.5	6	150	0.91	0.64
4.7	A	CA55-A016475TE250	7.5	8	250	0.63	0.44
6.8	C	CA55-C016685TE100	10.8	10	100	1.32	0.92
6.8	B	CA55-B016685TE150	10.8	6	150	0.91	0.64
6.8	A	CA55-A016685TE200	10.8	8	200	0.70	0.49
10	C	CA55-C016106TE080	16	6	80	1.47	1.03

CA55 Conductive Polymer Chip Tantalum Capacitors

STANDARD RATING

CAPACITANCE uF	CASE SIZE	PART NUMBER	DC LEAKAGE uA At 25℃ MAX	DF % MAX at 120HZ 25℃	ESR 100KHZ mΩ at 25℃ MAX	Ripple current 100KHz A	
						+25℃	+85℃
16 Volt. Rating							
10	B	CA55-B016106TE100	16	6	100	1.11	0.78
10	A	CA55-A016106TE200	16	8	200	0.70	0.49
15	C	CA55-C016156TE080	24	8	80	1.47	1.03
15	B	CA55-B016156TE090	24	6	90	1.17	0.82
22	D	CA55-D016226TE070	35. 2	10	70	1.79	1.25
22	C	CA55-C016226TE080	35. 2	6	80	1.47	1.03
22	B	CA55-B016226TE150	35. 2	8	150	0.91	0.64
33	D	CA55-D016336TE060	52. 8	6	60	1.93	1.35
33	C	CA55-C016336TE080	52. 8	8	80	1.47	1.03
47	V	CA55-V016476TE045	75. 2	10	45	2.82	1.97
47	E	CA55-E016476TE050	75. 2	10	50	2.23	1.56
47	D	CA55-D016476TE050	75. 2	6	50	2.11	1.48
47	C	CA55-C016476TE070	75. 2	6	70	1.58	1.11
68	V	CA55-V016686TE045	108	10	45	2.82	1.97
68	E	CA55-E016686TE050	108	10	50	2.23	1.56
68	D	CA55-D016686TE050	108	6	50	2.11	1.48
68	C	CA55-C016686TE070	108	8	70	1.58	1.11
100	V	CA55-V016107TE040	160	10	40	3.00	2.10
100	E	CA55-E016107TE040	160	8	40	2.50	1.75
100	D	CA55-D016107TE050	160	8	50	2.11	1.48
150	V	CA55-V016157TE040	240	10	40	3.00	2.10
150	E	CA55-E016157TE040	240	8	40	2.50	1.75
150	D	CA55-D016157TE050	240	10	50	2.11	1.48
220	V	CA55-V016227TE035	352	8	35	3.20	2.24
220	E	CA55-E016227TE035	352	8	35	2.67	1.87
220	D	CA55-D016227TE055	352	12	55	2.02	1.41
330	W	CA55-W016337TE035	528	8	35	3.30	2.31
330	V	CA55-V016337TE045	528	8	45	2.83	1.98
330	E	CA55-E016337TE050	528	10	50	2.23	1.56
470	G	CA55-G016477TE035	752	10	35	3.77	2.64
470	W	CA55-W016477TE035	752	10	35	3.30	2.31
680	G	CA55-G016687TE035	1088	10	35	3.77	2.64
1000	T	CA55-T016108TE035	1600	10	35	5.13	3.59
1500	T	CA55-T016158TE035	2400	12	35	5.13	3.59
20 Volt. Rating							

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STANDARD RATING

CAPACITANCE uF	CASE SIZE	PART NUMBER	DC LEAKAGE uA At 25℃ MAX	DF % MAX at 120HZ 25℃	ESR 100KHZ mΩ at 25℃ MAX	Ripple current 100KHz A	
						+25℃	+85℃
20 Volt. Rating							
10	C	CA55-C020106TE080	20	6	80	1.47	1.03
10	B	CA55-B020106TE100	20	8	100	1.11	0.78
15	D	CA55-D020156TE070	30	6	70	1.78	1.25
15	C	CA55-C020156TE080	30	6	80	1.47	1.03
15	B	CA55-B020156TE090	30	8	90	1.17	0.82
22	D	CA55-D020226TE060	44	6	60	1.94	1.36
22	C	CA55-C020226TE090	44	6	90	1.40	0.98
22	B	CA55-B020226TE150	44	8	150	0.91	0.64
33	V	CA55-V020336TE050	66	10	50	2.68	1.87
33	E	CA55-E020336TE060	66	10	60	2.04	1.42
33	D	CA55-D020336TE060	66	6	60	1.94	1.36
33	C	CA55-C020336TE090	66	8	90	1.40	0.98
47	V	CA55-V020476TE050	94	10	50	2.68	1.87
47	E	CA55-E020476TE050	94	6	50	2.23	1.56
47	D	CA55-D020476TE055	94	6	55	2.03	1.42
47	C	CA55-C020476TE090	94	8	90	1.40	0.98
68	V	CA55-V020686TE045	136	10	45	2.82	1.97
68	E	CA55-E020686TE045	136	6	45	2.36	1.65
68	D	CA55-D020686TE055	136	6	55	2.03	1.42
100	V	CA55-V020107TE040	200	10	40	3.00	2.10
100	E	CA55-E020107TE045	200	8	45	2.36	1.65
100	D	CA55-D020107TE055	200	8	55	2.03	1.42
150	V	CA55-V020157TE050	300	8	50	2.68	1.88
150	E	CA55-E020157TE050	300	8	50	2.23	1.56
220	W	CA55-W020227TE040	440	10	40	3.08	2.16
220	V	CA55-V020227TE050	440	10	50	2.68	1.88
220	E	CA55-E020227TE050	440	10	50	2.23	1.56
330	G	CA55-G020337TE040	660	10	40	3.53	2.47
470	G	CA55-G020477TE040	660	10	40	3.53	2.47
680	T	CA55-T020687TE040	1360	10	40	4.80	3.36
1000	T	CA55-T020108TE040	2000	10	40	4.80	3.36
25 Volt. Rating							
4.7	C	CA55-T025475TE150	11. 7	6	150	1.08	0.76
4.7	B	CA55-B025475TE150	11.7	6	150	0.91	0.64

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STANDARD RATING

CAPACITANCE uF	CASE SIZE	PART NUMBER	DC LEAKAGE uA At 25℃ MAX	DF % MAX at 120HZ 25℃	ESR 100KHZ mΩ at 25℃ MAX	Ripple current 100KHz A	
						+25℃	+85℃
25 Volt. Rating							
6.8	D	CA55-D025685TE100	17	10	100	1.50	1.05
6.8	C	CA55-C025685TE150	17	6	150	1.08	0.76
6.8	B	CA55-B025685TE150	17	6	150	0.91	0.64
10	D	CA55-D025106TE090	25	10	90	1.58	1.10
10	C	CA55-C025106TE100	25	6	100	1.33	0.93
10	B	CA55-B025106TE150	25	6	150	0.91	0.64
15	D	CA55-D025156TE080	37. 5	6	80	1.67	1.17
15	C	CA55-C025156TE100	37. 5	6	100	1.33	0.93
15	B	CA55-B025156TE150	37. 5	8	150	0.91	0.64
22	V	CA55-V025226TE070	55	10	70	2.26	1.58
22	E	CA55-E025226TE075	55	10	75	1.82	1.27
22	D	CA55-D025226TE075	55	6	75	1.73	1.21
22	C	CA55-C025226TE100	55	8	100	1.33	0.93
33	V	CA55-V025336TE055	82. 5	10	55	2.55	1.78
33	E	CA55-V025336TE060	82.5	6	60	2.04	1.43
33	D	CA55-D025336TE060	82. 5	8	60	1.94	1.36
47	V	CA55-D025476TE050	117	10	50	2.68	1.88
47	E	CA55-E025476TE050	117	6	50	2.23	1.56
47	D	CA55-D025476TE060	117	8	60	1.94	1.36
68	V	CA55-V025686TE050	170	6	50	2.68	1.88
68	E	CA55-E025686TE050	170	6	50	2.23	1.56
68	D	CA55-D025686TE070	170	8	70	1.78	1.25
100	W	CA55-W025107TE050	250	8	50	2.76	1.93
100	V	CA55-V025107TE060	250	8	60	2.44	1.71
100	E	CA55-E025107TE060	250	8	60	2.04	1.43
150	G	CA55-G025157TE050	375	10	50	3.16	2.21
150	W	CA55-W025157TE050	375	10	50	2.76	1.93
150	V	CA55-V025157TE050	375	10	50	2.68	1.88
220	G	CA55-G025227TE050	550	10	50	3.16	2.21
220	W	CA55-W025227TE050	550	10	50	2.76	1.93
330	T	CA55-T025337TE050	825	10	50	4.28	3.00
330	G	CA55-G025337TE050	825	10	50	3.16	2.21
470	T	CA55-T025477TE050	1175	10	50	4.28	3.00
35 Volt. Rating							
4.7	D	CA55-D035475TE120	16.4	10	120	1.36	0.95

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STANDARD RATING							
CAPACITANCE uF	CASE SIZE	PART NUMBER	DC LEAKAGE uA At 25℃ MAX	DF % MAX at 120HZ 25℃	ESR 100KHZ mΩ at 25℃ MAX	Ripple current 100KHz A	
						+25℃	+85℃
35 Volt. Rating							
4.7	C	CA55-C035475TE200	16. 4	6	200	0.93	0.65
4.7	B	CA55-B035475TE200	16. 4	6	200	0.78	0.55
6.8	D	CA55-D035685TE090	23.8	6	90	1.58	1.11
6.8	C	CA55-C035685TE200	23. 8	6	200	0.93	0.65
6.8	B	CA55-B035685TE200	23. 8	8	200	0.78	0.55
10	D	CA55-D035106TE090	35. 0	6	90	1.58	1.11
10	C	CA55-C035106TE200	35. 0	6	200	0.93	0.65
15	V	CA55-V035156TE070	52. 5	10	70	2.26	1.58
15	E	CA55-E035156TE075	52. 5	10	75	1.82	1.27
15	D	CA55-D035156TE075	52. 5	6	75	1. 78	1. 25
15	C	CA55-C035156TE200	52. 5	8	200	0.93	0.65
22	V	CA55-V035226TE090	77. 0	6	90	2.00	1.40
22	E	CA55-E035226TE090	77. 0	6	90	1.67	1.17
22	D	CA55-D035226TE090	77. 0	6	90	1.58	1.11
33	V	CA55-V035336TE065	115.5	6	65	2.36	1.65
33	E	CA55-E035336TE065	115. 5	6	65	1.96	1.37
33	D	CA55-D035336TE070	115. 5	8	70	1.78	1.25
47	W	CA55-W035476TE065	164. 5	6	65	2.41	1.69
47	V	CA55-V035476TE070	164. 5	6	70	2.36	1.65
47	E	CA55-E035476TE070	164. 5	8	70	1.96	1.37
68	G	CA55-G035686TE065	238. 0	8	65	2.77	1.94
68	W	CA55-W035686TE065	238. 0	10	65	2.41	1.69
68	V	CA55-V035686TE065	238. 0	10	65	2.36	1.65
100	G	CA55-G035107TE065	350. 0	10	65	2.77	1.94
100	W	CA55-W035107TE065	350. 0	10	65	2.41	1.69
150	G	CA55-G035157TE065	525.0	10	65	2.77	1.94
220	T	CA55-T035227TE065	770. 0	10	65	3.76	2.63
330	T	CA55-T035337TE065	1155. 0	10	65	3.76	2.63
50 Volt. Rating							
1.0	C	CA55-C050105TE200	5. 0	6	200	0.93	0.65
1.0	B	CA55-B050105TE300	5. 0	6	300	0.64	0.45
1.5	D	CA55-D050155TE200	7. 5	10	200	1.06	0.74
1.5	C	CA55-C050155TE200	7.5	6	200	0.93	0.65
1.5	B	CA55-B050155TE300	7.5	6	300	0.64	0.45
2.2	D	CA55-D050225TE200	11.0	6	200	1.06	0.74

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STANDARD RATING							
CAPACITANCE uF	CASE SIZE	PART NUMBER	DC LEAKAGE uA At 25℃ MAX	DF % MAX at 120HZ 25℃	ESR 100KHZ mΩ at 25℃ MAX	Ripple current 100KHz A	
						+25℃	+85℃
50 Volt. Rating							
2.2	C	CA55-C050225TE200	11.0	6	200	0.93	0.65
2.2	B	CA55-B050225TE350	11.0	8	350	0.60	0.42
3.3	D	CA55-D050335TE100	16.5	6	100	1.50	1.05
3.3	C	CA55-C050335TE200	16.5	6	200	0.93	0.65
4.7	D	CA55-D050475TE100	23.5	6	100	1.50	1.05
4.7	C	CA55-C050475TE200	23.5	6	200	0.93	0.65
6.8	V	CA55-V050685TE090	34.0	10	90	2.00	1.40
6.8	E	CA55-E050685TE090	34.0	6	90	2.38	1.67
6.8	D	CA55-D050685TE090	34.0	6	90	1.58	1.11
6.8	C	CA55-C050685TE200	34.0	8	200	0.93	0.65
10	V	CA55-V050106TE100	50.0	6	100	1.90	1.33
10	E	CA55-E050106TE100	50.0	6	100	1.58	1.11
10	D	CA55-D050106TE120	50.0	8	120	1.37	0.96
15	W	CA55-W050156TE075	75.0	6	75	2.24	1.57
15	V	CA55-V050156TE100	75.0	6	100	1.90	1.33
15	E	CA55-E050156TE100	75.0	6	100	1.58	1.11
22	W	CA55-W050226TE075	110.0	6	75	2.24	1.57
22	V	CA55-V050226TE100	110.0	6	100	1.90	1.33
22	E	CA55-E050226TE100	110.0	8	100	1.58	1.11
22	D	CA55-D050226TE100	110.0	8	100	1.50	1.05
33	G	CA55-G050336TE075	165.0	8	75	2.58	1.81
33	W	CA55-W050336TE075	165.0	8	75	2.24	1.73
33	V	CA55-V050336TE100	165.0	8	100	1.90	1.33
33	E	CA55-E050336TE100	165.0	8	100	1.58	1.11
47	G	CA55-G050476TE050	235.0	8	50	2.58	1.81
47	W	CA55-W050476TE075	235.0	8	75	2.24	1.57
47	V	CA55-V050476TE090	235.0	10	90	2.00	1.40
68	G	CA55-G050686TE075	340.0	8	75	2.58	1.81
68	W	CA55-W050686TE090	340.0	8	90	2.05	1.44
68	V	CA55-V050686TE090	340.0	10	90	2.00	1.40
100	T	CA55-T050107TE075	500.0	10	75	3.50	2.45
150	T	CA55-T050157TE075	750.0	10	75	3.50	2.45
63 Volt. Rating							
0.68	C	CA55-C063684TE200	5.0	6	200	0.93	0.65
0.68	B	CA55-B063684TE300	5.0	6	300	0.64	0.45

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STANDARD RATING							
CAPACITANCE uF	CASE SIZE	PART NUMBER	DC LEAKAGE uA At 25℃ MAX	DF % MAX at 120HZ 25℃	ESR 100KHZ mΩ at 25℃ MAX	Ripple current 100KHz A	
						+25℃	+85℃
63 Volt. Rating							
1.0	C	CA55-C063105TE200	6.3	6	200	0.93	0.65
1.0	B	CA55-B063105TE300	6.3	8	300	0.64	0.45
1.5	D	CA55-D063155TE120	9.5	6	120	1.37	0.96
1.5	C	CA55-C063155TE200	9.5	6	200	0.93	0.65
2.2	D	CA55-D063225TE120	13.9	6	120	1.37	0.96
2.2	C	CA55-C063225TE200	13.9	6	200	0.93	0.65
3.3	D	CA55-D063335TE120	20.8	6	120	1.37	0.96
3.3	C	CA55-C063335TE200	20.8	6	200	0.93	0.65
4.7	E	CA55-E063475TE120	29.6	6	120	1.44	1.01
4.7	D	CA55-D063475TE120	29.6	6	120	1.37	0.96
4.7	C	CA55-C063475TE200	29.6	8	200	0.93	0.65
6.8	V	CA55-V063685TE120	42.8	10	120	1.73	1.21
6.8	E	CA55-E063685TE120	42.8	6	120	1.44	1.01
6.8	D	CA55-D063685TE120	42.8	8	120	1.37	0.96
10	V	CA55-V063106TE100	63.0	6	100	1.90	1.33
10	E	CA55-E063106TE100	63.0	6	100	1.58	1.11
10	D	CA55-D063106TE120	63.0	8	120	1.37	0.96
15	W	CA55-W063156TE075	94.5	6	75	2.24	1.57
15	V	CA55-V063156TE100	94.5	6	100	1.90	1.33
15	E	CA55-E063156TE100	94.5	8	100	1.58	1.11
22	G	CA55-G063226TE075	138.6	8	75	2.58	1.81
22	W	CA55-W063226TE075	138.6	8	75	2.24	1.57
22	V	CA55-V063226TE100	138.6	8	100	1.90	1.33
33	G	CA55-G063336TE075	207.9	8	75	2.58	1.81
33	W	CA55-W063336TE075	207.9	8	75	2.24	1.57
47	G	CA55-G063476TE075	296.1	8	75	2.58	1.81
47	W	CA55-W063476TE075	296.1	12	75	2.24	1.57
68	T	CA55-T063686TE075	428.4	8	75	3.50	2.45
68	G	CA55-G063686TE075	428.4	10	75	2.50	1.75
100	T	CA55-T063107TE075	630.0	10	75	3.5	2.45
75 Volt. Rating							
0.33	B	CA55-B075334TE400	5.0	10	400	0.55	0.39
0.33	A	CA55-A075334TE800	5.0	10	800	0.35	0.24
0.47	C	CA55-C075474TE250	5.0	6	250	0.84	0.59
0.47	B	CA55-B075474TE350	5.0	6	350	0.60	0.42

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STANDARD RATING							
CAPACITANCE uF	CASE SIZE	PART NUMBER	DC LEAKAGE uA At 25℃ MAX	DF % MAX at 120HZ 25℃	ESR 100KHZ mΩ at 25℃ MAX	Ripple current 100KHz A	
						+25℃	+85℃
75 Volt. Rating							
0.68	C	CA55-C075684TE250	5.1	6	250	0.84	0.59
0.68	B	CA55-B075684TE350	5.1	8	350	0.60	0.42
1.0	D	CA55-D075105TE120	7.5	6	120	1.37	0.96
1.0	C	CA55-C075105TE250	7.5	6	250	0.84	0.59
1.5	D	CA55-D075155TE120	11.3	6	120	1.37	0.96
1.5	C	CA55-C075155TE250	11.3	6	250	0.84	0.59
2.2	D	CA55-D075225TE120	16.5	6	120	1.37	0.96
2.2	C	CA55-C075225TE250	16.5	8	250	0.84	0.59
3.3	E	CA55-E075335TE120	24.8	6	120	1.44	1.01
3.3	D	CA55-D075335TE120	24.8	6	120	1.37	0.96
4.7	V	CA55-V075475TE120	35.3	6	120	1.73	1.21
4.7	E	CA55-E075475TE120	35.3	6	120	1.44	1.01
4.7	D	CA55-D075475TE150	35.3	6	150	1.23	0.86
6.8	V	CA55-V075685TE120	51.0	6	120	1.73	1.20
6.8	E	CA55-E075685TE120	51.0	8	120	1.44	1.00
6.8	D	CA55-D075685TE120	51.0	8	120	1.37	0.96
10	W	CA55-W075106TE100	75.0	6	100	1.94	1.36
10	V	CA55-V075106TE120	75.0	8	120	1.73	1.21
10	E	CA55-E075106TE120	75.0	10	120	1.44	1.00
15	W	CA55-W075156TE100	112.5	10	100	1.95	1.36
15	V	CA55-V075156TE120	112.5	10	120	1.73	1.21
22	G	CA55-G075226TE100	165.0	10	100	2.24	1.56
22	W	CA55-W075226TE100	165.0	10	100	1.95	1.36
33	T	CA55-T075336TE120	247.5	12	120	3.39	2.37
47	T	CA55-T075476TE120	352.5	12	120	2.77	1.94
68	T	CA55-T075686TE120	510.0	12	120	2.77	1.94
100	T	CA55-T075107TE120	750.0	12	120	2.77	1.94
100 Volt. Rating							
0.1	A	CA55-A100104TE800	5.0	10	800	0.35	0.24
0.15	B	CA55-B100154TE600	5.0	10	600	0.45	0.31
0.15	A	CA55-A100154TE800	5.0	10	800	0.35	0.24
0.22	B	CA55-B100224TE600	5.0	10	600	0.45	0.31
0.22	A	CA55-A100224TE800	5.0	10	800	0.35	0.24
0.33	C	CA55-C100334TE300	5.0	10	300	0.76	0.53
0.33	B	CA55-B100334TE500	5.0	10	500	0.50	0.35

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STANDARD RATING							
CAPACITANCE uF	CASE SIZE	PART NUMBER	DC LEAKAGE uA At 25℃ MAX	DF % MAX at 120HZ 25℃	ESR 100KHZ mΩ at 25℃ MAX	Ripple current 100KHz A	
						+25℃	+85℃
100 Volt. Rating							
0.47	C	CA55-C100474TE300	5.0	6	300	0.76	0.53
0.47	B	CA55-B100474TE400	5.0	8	400	0.56	0.39
0.68	D	CA55-D100684TE120	6.8	6	120	1.37	0.96
0.68	C	CA55-C100684TE300	6.8	6	300	0.76	0.53
1.0	D	CA55-D100105TE150	10.0	6	150	1.23	0.86
1.0	C	CA55-C100105TE300	10.0	8	300	0.76	0.53
1.5	E	CA55-E100155TE150	15.0	6	150	1.28	0.90
1.5	D	CA55-D100155TE300	15.0	8	300	1.23	0.86
2.2	V	CA55-V100225TE150	22.0	6	150	1.54	1.08
2.2	E	CA55-E100225TE150	22.0	8	150	1.28	0.90
3.3	W	CA55-W100335TE125	33.0	6	125	1.74	1.22
3.3	V	CA55-V100335TE150	33.0	6	150	1.54	1.08
4.7	W	CA55-W100475TE125	47.0	6	125	1.74	1.22
4.7	V	CA55-V100475TE150	47.0	8	150	1.54	1.08
4.7	E	CA55-E100475TE250	47.0	8	250	0.94	0.66
6.8	W	CA55-W100685TE125	68.0	6	125	1.74	1.22
6.8	V	CA55-V100685TE150	68.0	8	150	1.54	1.08
10	W	CA55-W100106TE150	100.0	10	150	1.59	1.11
15	G	CA55-G100156TE100	150.0	12	100	2.23	1.56
22	T	CA55-T100226TE100	220.0	12	100	3.03	2.12
33	T	CA55-T100336TE100	330.0	12	100	3.03	2.12

Series CSP (CA55)

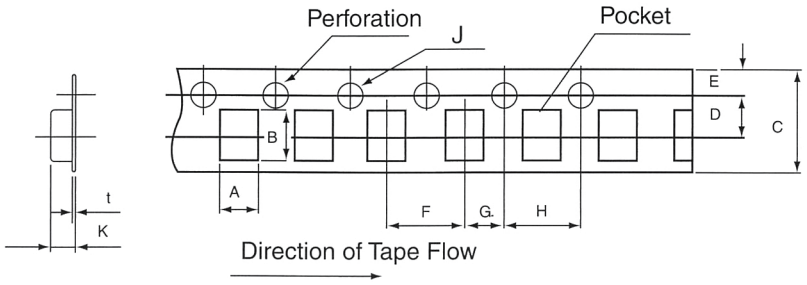
Polymer Solid Electrolytic Tantalum SMD Capacitors

Carrier Tape Packaging Specification
Explantion Of Part Numbers

CA55	C	6R3	2 2 7	T&B	R	065
Series Code	Case Size	Rated Voltage	Nominal Capacitance	Carrier Tape & Boxed	Polarity Orientation	ESR

Dimensions of the carrier tape and standard parts quantity per reel.

Dimensions

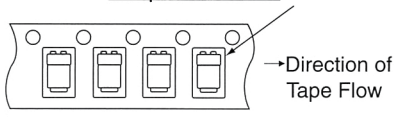


(Unit:mm)

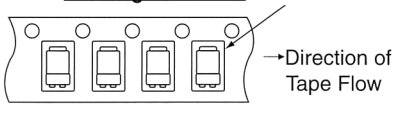
CASE SIZE	A ±0.1	B ±0.1	C ±0.3	D ±0.1	E ±0.1	F ±0.1	G ±0.1	H ±0.1	J +0.1 -0	K MAX	t	Quantity Per Reel
A	1.9	3.5	8.0	3.5	1.75	4.0	2.0	4.0	1.5	2.5	0.2	2000
B	3.1	3.8	8.0	3.5	1.75	4.0	2.0	4.0	1.5	2.5	0.2	2000
C	3.6	6.4	12.0	5.5	1.75	8.0	2.0	4.0	1.5	3.0	0.3	500
D	4.7	7.7	12.0	5.5	1.75	8.0	2.0	4.0	1.5	3.4	0.3	500
E	4.6	7.6	12.0	5.5	1.75	8.0	2.0	4.0	1.5	4.6	0.3	500

Inserting Direction (Polarity Orientation)

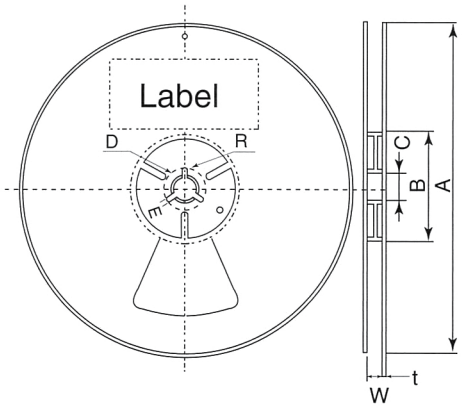
Polarity L: To be inserted with the positive side to the feed hole.



Polarity R: To be inserted with the negative side to the feed hole.



Reel Dimensions



(Unit:mm)

Tape width	8	12
A^{0}_{-3}	ø 180	←
B^{+1}_{0}	ø 60	←
C ± 0.2	ø 13	←
D ± 0.8	ø 21	←
E ± 0.5	2.0	←
W ± 0.3	9.0	13.0
t ± 0.4	1.3	←
R ± 0.4	10.5	←

Tape Leader and Tailer